



# **STIC Search Report**

## **Biotech-Chem Library**

STIC Database Tracking Number: 157441

TO: Terra Gibbs  
Location: REM/2D10/2C18  
Art Unit: 1635  
Wednesday, June 29, 2005  
Case Serial Number: 09/918026

From: Barb O'Bryen  
Location: Biotech-Chem Library  
Remsen 1a69  
Phone: 571-272-2518

barbara.obryen@uspto.gov

### Search Notes

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 14:19:15 ; Search time 2 Seconds  
(without alignments)  
3.201 Million cell updates/sec

Title: US-09-918-025633 COPY  
Perfect score: 1569  
Sequence: 1 atggagccaggggggcccg.....cttggtcctgccatacctag 1569

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 0.5

Searched: 1 segs, 2040 residues

Total number of hits satisfying chosen parameters: 2

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : af059203.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1564.2	99.7	2040	1	af059203
2	27.4	1.7	2040	1	af059203

ALIGNMENTS

RESULT 1  
af059203  
TOIG of: af059203 check: 876 from: 1 to: 2040

LOCUS AF059203 2040 bp mRNA linear PRI 15-OCT-1998  
DEFINITION Homo sapiens acyl coenzyme A:cholesterol acyltransferase 2 mRNA, complete cds.  
ACCESSION AF059203  
VERSION AF059203.1 GI:3746534  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1 (bases 1 to 2040)  
Oelkers,P., Behari,A., Cromley,D., Billheimer,J.T. and Sturley,S.L.  
AUTHORS Characterization of two human genes encoding acyl coenzyme A:cholesterol acyltransferase-related enzymes  
TITLE J. Biol. Chem. 273 (41), 26765-26771 (1998)  
JOURNAL MEDLINE 98434592  
PUBMED 9756920  
REFERENCE 2 (bases 1 to 2040)  
Oelkers,P., Cromley,D., Behari,A., Billheimer,J.T. and Sturley,S.L.  
AUTHORS Direct Submission  
TITLE Submitted (13-APR-1998) Human Nutrition, Columbia University, 630 W. 168th Street, New York, NY 10032, USA  
JOURNAL

FEATURES	Location/Qualifiers
source	1..2040
	/organism="Homo sapiens"
	/mol_type="mRNA"
	/db_xref="taxon:9606"
	/chromosome="12"
	/cell_type="hepatocyte"
CDS	52..1620
	/note="ACAT2"
	/codon_start=1
	/product="acyl coenzyme A:cholesterol acyltransferase 2"
	/protein_id="AAC83998.1"
	/db_xref="GI:3746535"
	/translation="MEFGARLRRLQTEGLGERERPCDGNTEHTRAPDLVQVTRH MEAVKALQEQQLRELDAREAIQSPQDKLPPLPPPSLSLTPQPSLQKQ VFIIRKSLDELMEVQHFRTIYHFIAGLCVFIISTLAIDFIDGRLLLEPDLIFSF GOLPLALVTWVMEFLSTLLAPYQALRLWARGTWTQATGLCALLAAHAAVLCALPVHV AVEHQLPASCRLVLFQVRFPLMSYSFLREAVPGTLRARGEGIQAFSFSYLFLF ALVLSILHATLPGIFIMLLIFFAFLHCLNAPAEMLRFGDRMFYDMWMSRPFSTR TMYVVDHLYSYVYQDGLRLGARARGVAMLVFLVSAVAHEYIFCVLGFYFVFL ILFLVIGMLNFMHMDQRTGPAWNLMTMLFLGGIQVSLYCYQEWYARRHCPPLQAT FWGLVTPRSMSCHT"
ORIGIN	
	af059203 Length: 2040 June 29, 2005 14:15 Type: N Check: 876
	af059203
Query Match	99.7%; Score 1564.2; DB 1; Length 2040;
Best Local Similarity	99.8%; Pred. No. 0;
Matches 1566; Conservative	0; Mismatches 3; Indels 0; Gaps 0;
QY	1 ATGGAGCCAGGGGGGGCCGCTCTGCGCTCTGAGAGGACAGAGGCGTGGAGGGGAGCGG 60
DB	52 ATGGAGCCAGGGGGGGCCGCTCTGCGCTCTGAGAGGACAGAGGCGTGGAGGGGAGCGG 111
QY	61 GAGCGCCAAACCTGTGTGAGATGGAACAACAGAGGACAGAGGCGCGGAGCTTGGTACAA 120
DB	112 GAGCGCCAAACCTGTGTGAGATGGAACAACAGAGGACAGAGGCGCGGAGCTTGGTACAA 171
QY	121 TGGACCCGACACATGAGGCGTGTGAAGGACAAATGCTGAGGACAGGCGGAGGACAACTG 180
DB	172 TGGACCCGACACATGAGGCGTGTGAAGGACAAATGCTGAGGACAGGCGGAGGACAACTG 231
QY	181 AGGAGCTGTGTGATCGGGCCATGCGGGAGGCTATACAAATCTTACCATCACAAGACAA 240
DB	232 AGGAGCTGTGTGATCGGGCCATGCGGGAGGCTATACAAATCTTACCATCACAAGACAA 291
QY	241 CCTCTGCGCCACCTCCCGAGGTTCTTGTGAGCAGGACCCAGGAGCCATCCCTGGGGAAA 300
DB	292 CCTCTGCGCCACCTCCCGAGGTTCTTGTGAGCAGGACCCAGGAGCCATCCCTGGGGAAA 351
QY	301 CAGAAAGTTTTCATCATCGCAAGTCCCTGCTTGTGAGCTGATGAGGTCGACGATTC 360
DB	352 CAGAAAGTTTTCATCATCGCAAGTCCCTGCTTGTGAGCTGATGAGGTCGACGATTC 411
QY	361 CGCACCATCTACACATGTTTCATCGCTGCGCTGTGTCTTTCATCATCAGCACCTCGCC 420
DB	412 CGCACCATCTACACATGTTTCATCGCTGCGCTGTGTCTTTCATCATCAGCACCTCGCC 471
QY	421 ATCGACTTATTCATGAGGCGAGCTGCTGCTGAGTTTGACCTACTGATCTTCAGCTTC 480
DB	472 ATCGACTTATTCATGAGGCGAGCTGCTGCTGAGTTTGACCTACTGATCTTCAGCTTC 531
QY	481 GGACAGCTGCATTCGCGCTGGTGACCTGGGTGCCCATGTTTCTGTCCACCTGTGTGGCG 540
DB	532 GGACAGCTGCATTCGCGCTGGTGACCTGGGTGCCCATGTTTCTGTCCACCTGTGTGGCG 591
QY	541 CCCTACAGCCCTTACGGCTGTGGGCGCAGGCGACCTTGGACGCGAGCGACCGGCTCGGC 600
DB	592 CCCTACAGCCCTTACGGCTGTGGGCGCAGGCGACCTTGGACGCGAGCGACCGGCTCGGC 651
QY	601 TGTGCGCTTTTAGCCGCCACACGCCGCTGTGCTCTGTGCGCGCTGCGGCTGCAGGTGGCCGTG 660

[illegible]

## RESULT 2

af059203/c

af059203/c  
; TOIG of: af059203 check: 876 from: 1 to: 2040

LOCUS	AF059203	2040 bp	mRNA	linear	PRI 15-OCT-1998
;					
;					

```

; DEFINITION Homo sapiens acyl coenzyme A:cholesterol acyltransferase 2 mRNA,
; complete cds.
; ACCESSION AF059203
; VERSION AF059203.1 GI:3746534
; KEYWORDS
; SOURCE Homo sapiens (human)
; ORGANISM Homo sapiens
; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
; REFERENCE 1 (bases 1 to 2040)
; AUTHORS Oelkers, P., Behari, A., Cromley, D., Billheimer, J.T. and Sturley, S.L.
; TITLE Characterization of two human genes encoding acyl coenzyme
; A:cholesterol acyltransferase-related enzymes
; JOURNAL J. Biol. Chem. 273 (41), 26765-26771 (1998)
; MEDLINE 98434592
; PUBMED 9756920
; REFERENCE 2 (bases 1 to 2040)
; AUTHORS Oelkers, P., Cromley, D., Behari, A., Billheimer, J.T. and Sturley, S.L.
; TITLE Direct Submission
; JOURNAL Submitted (13-APR-1998) Human Nutrition, Columbia University, 630
; W. 168th Street, New York, NY 10032, USA
; FEATURES
; source
; location
; CDS
; /organism="Homo sapiens"
; /mol_type="mRNA"
; /db_xref="taxon:9606"
; /chromosome="12"
; /cell_type="hepatocyte"
; 52..1620
; note="ACAT2"
; /codon_start=1
; /product="acyl coenzyme A:cholesterol acyltransferase 2"
; /protein_id="AAC63998.1"
; /db_xref="GI:3746535"
; /translation="MEPGCARLRLQRTGLGERERQPCDGNTEHTRAPDLVQWTRF
; MEAVKQLLEOAGQRLLEDRAEAIQVSPQDKPLPPPPSGLSRTOEPSLIGKQ
; VPIRKSLDELMVEQHRTTYHMEIAGLCVEIISLTAIDFIDEGRLLEFDLLIFSE
; GQPLALVTVWPMFLSTLLIAPYQALRLNWARHTWTQATGLCALLAHAVYLCAIPVA
; AVEHQLPSPASRCRVLFVEQRYVFLMKSYFLREAVPGTLRARGGIIQAPSFSSILYFLI
; CPTILYRETYPTPYRVNRYNAKNAQALGCVLVYACFILGRILCVPVFANNRSRPFST
; ALVLSIHTATLPIFMILLIIPAFILHCLMNAFAEMLRFGDRMPFDMWNSTSFNSYFI
; TWNVVHDWLVSYYVQDGLRILGARGVAMGLVFLVSAVAHEYIFCVLIGFFYPVMI
; ILFLVIGMLNFMNMDHQRTGPAWNVLMTMLFLGQGIQVSLVYQEWYARRHCLPQQA
; FNLGVTPRSWSCHT"
; ORIGIN
;
; AF059203 Length: 2040 June 29, 2005 14:15 Type: N Check: 876
af059203
;
; Query Match 1.7%; Score 27.4; DB 1; Length 2040;
; Best Local Similarity 47.9%; Pred. No. 0;
; Matches 79; Conservative 0; Mismatches 86; Indels 0; Gaps 0;
;
; Qy 539 CGCCGTACACAGGCCCTACGGCTGTGGGCGAGGGGCACCTGGACGACGACGCGGCTGG 598
; Db 754 CGRAGACCAGGACACACGCGGAGCGCGCGGAGCTGATGCTCCACGCGCACGCTGGACCG 695
;
; Qy 599 GCTGTGGCGCTTTTAGCCGCCCAACGCCGCTGGTGCTCTGCGCGCTCGCGGTCCACGTGGCGCG 658
; Db 694 GCAGCGCGCAGACGACCAACGCGCTGGGCGGCTAGCAGCGCACAGGCCCGCGCTGCCT 635
;
; Qy 659 TGGAGCATCAGCTCCCGCGCGCCCTCCCGCTTGCTGCTTGCTCTTCG 703
; Db 634 CGGTCCAGGTGCGCTTGGCCACACAGCCGCTAGGGCCCTGGTACGGCG 590
;
; Search completed: June 29, 2005, 14:19:17
; Job time : 2 secs

```